FLORENCE COPPER

FLORENCE COPPER INC.
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florencecopper.com

March 4, 2019
File No. 132473-003

ADEQ Water Quality Compliance Section
Mail Code 5415B-1
1110 West Washington Street
Phoenix, Arizona 85007

Attention: Mr. Tracy Bunch

Subject: Weekly Monitoring Report for Week Ending 02/23/2019
Florence Copper, Production Test Facility
Aquifer Protection Permit No. 106360, LTF 61845

Dear Mr. Bunch:

Florence Copper is submitting this report in accordance with Table 4.1-8 and Section 2.7.4.4 of the Production Test Facility Temporary Aquifer Protection Permit (APP) No. 106360.

In accordance with Table 4.1-8 of the APP, this report includes In-Situ Best Available Demonstrated Control Technology (BADCT) compliance monitoring for the PTF that is required to be reported on a weekly basis including:

- Recovered volume to injection volume,
- Inward hydraulic gradient, and
- Maximum injection pressure.

A map showing the location of the PTF injection, recovery, and observation wells is included as Figure 1.

Recovered Volume to Injection Volume

A summary of the injected and recovered volumes for the week 02/17 to 02/23/2019 is included in Table 1. The total injected and recovered volumes for the PTF as a daily total are also presented on Figure 2.

During the reporting period no exceedance of the alert level was measured for recovered volume to injected volume. The alert level is the recovered volume shall exceed the injected volume.

Inward Hydraulic Gradient

Table 2 includes a summary of water levels in the recovery and observation well pairs. Hydrographs showing the water level elevation for each recovery well and observation well pair are included in Figure 3.

During the reporting period UIC Permit-required temperature logs were run on recovery wells R-01 (PW-05), R-02 (PW-06), and R-05 (PW-09) on February 19, 20 and 21 respectively. Injection and recovery well flows were adjusted to maintain hydraulic gradient during the well down-times, and there was no exceedance of the alert level for the inward hydraulic gradient. The alert level for the inward hydraulic gradient is that the water

level elevation in the paired observation well must be a minimum of 1 foot higher than the paired recovery well.

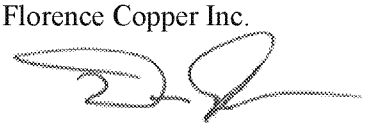
Injection Pressure

A summary of the injection pressures during the reporting period are included as Table 3.

During the reporting period no alert levels were exceeded for injection pressure, the injection pressure limit for the injection wells is limited by the fracture gradient of 0.65 pounds per square inch (psi) per foot. For the PTF injection wells this pressure limit equates to 104 psi.

Please contact me at 520-374-3984 if you require any additional information.

Sincerely,
Florence Copper Inc.



Dan Johnson
Vice President – General Manager

Attachments:
Tables and Figures

cc: Nancy Rumrill, United States Environmental Protection Agency

TABLES

Table 1. Injected and recovered volumes (gallons) for the week 02/17 to 02/23/2019

Date	Time	Daily Injection Flow	Daily Recovery Flow	PLS/Raff
2/17/2019	7:00:00 AM	311200	345900	1.11
2/18/2019	7:00:00 AM	297800	334300	1.12
2/19/2019	7:00:00 AM	285000	327000	1.15
2/20/2019	7:00:00 AM	309400	345700	1.12
2/21/2019	7:00:00 AM	311600	343200	1.10
2/22/2019	7:00:00 AM	309800	342200	1.10
2/23/2019	7:00:00 AM	311100	344300	1.11
Weekly Average		305129	340371	1.12

Table 2. Average daily water levels in the recovery and observation well pairs (amsl)

Well Pairs Avg Elev	2/17/19	2/18/19	2/19/19	2/20/19	2/21/19	2/22/19	2/23/19
PW-05 (R-01)	1243.00	1243.46	1245.84	1245.86	1242.63	1242.76	1243.56
O-01	1246.94	1247.69	1247.87	1247.78	1247.19	1248.17	1249.03
O-07	1246.85	1247.29	1247.77	1247.26	1246.94	1247.78	1248.50
PW-06 (R-02)	1243.09	1244.83	1243.71	1246.12	1246.61	1245.27	1246.25
O-01	1246.94	1247.69	1247.87	1247.78	1247.19	1248.17	1249.03
O-02	1247.81	1248.32	1248.62	1248.17	1248.00	1248.99	1249.93
PW-07 (R-03)	1245.20	1246.78	1246.01	1241.22	1241.06	1244.43	1246.62
O-02	1247.81	1248.32	1248.62	1248.17	1248.00	1248.99	1249.93
O-03	1248.59	1249.20	1249.37	1247.16	1247.56	1249.62	1250.75
PW-08 (R-04)	1245.02	1247.11	1246.52	1241.02	1242.29	1245.94	1247.31
O-03	1248.59	1249.20	1249.37	1247.16	1247.56	1249.62	1250.75
PW-09 (R-05)	1245.54	1247.09	1246.32	1238.90	1240.48	1244.51	1245.51
O-04	1247.94	1248.83	1248.68	1247.27	1247.58	1248.79	1249.49
PW-10 (R-06)	1242.47	1242.93	1243.08	1242.13	1243.55	1244.29	1244.12
O-04	1247.94	1248.83	1248.68	1247.27	1247.58	1248.79	1249.49
O-05	1247.17	1247.68	1247.86	1247.06	1247.22	1248.09	1248.75
PW-11 (R-07)	1244.57	1244.32	1245.29	1245.17	1245.13	1245.65	1246.32
O-05	1247.17	1247.68	1247.86	1247.06	1247.22	1248.09	1248.75
O-06	1246.71	1247.17	1247.47	1247.03	1246.95	1247.66	1248.33
PW-12 (R-08)	1241.30	1241.67	1241.69	1241.50	1242.04	1242.78	1243.36
O-06	1246.71	1247.17	1247.47	1247.03	1246.95	1247.66	1248.33
O-07	1246.85	1247.29	1247.77	1247.26	1246.94	1247.78	1248.50

Table 3. Injection well pressures (psi)

Ending	I-01			I-02			I-03			I-04		
Date	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX	AVG	MIN	MAX
2/17/2019	0	0	0	0	0	0	0	0	0	0	0	0
2/18/2019	0	0	0	0	0	0	0	0	0	0	0	0
2/19/2019	0	0	0	0	0	0	0	0	0	0	0	0
2/20/2019	0	0	0	0	0	0	0	0	0	0	0	0
2/21/2019	0	0	0	0	0	0	0	0	0	0	0	0
2/22/2019	0	0	0	0	0	0	0	0	0	0	0	0
2/23/2019	0	0	0	0	0	0	0	0	0	0	0	0

FIGURES

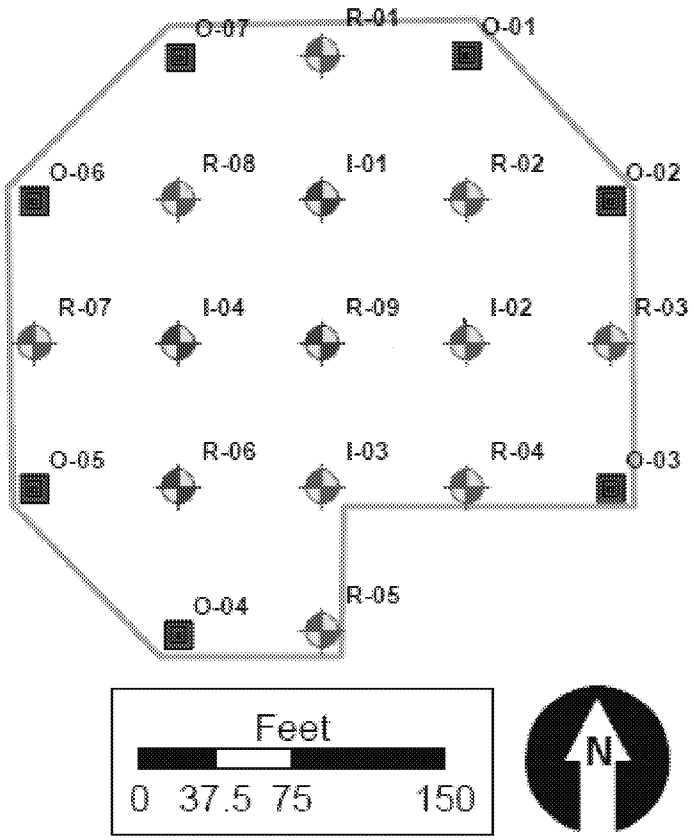


Figure 1. PTF injection, recovery, and observation well locations

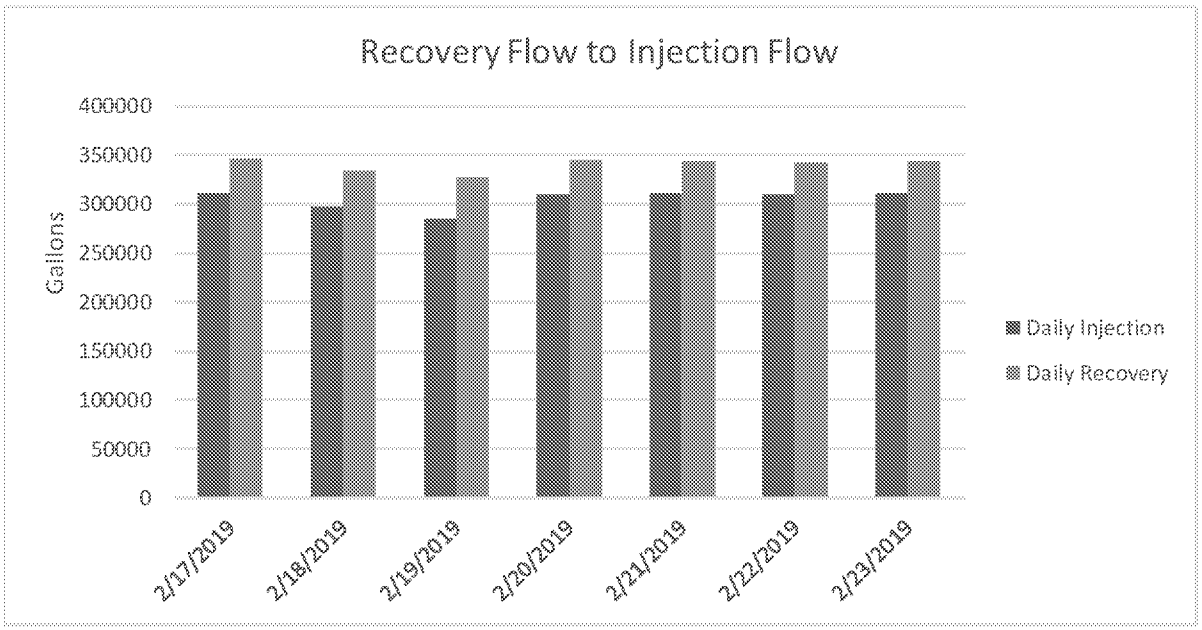


Figure 2. Recovered volume to injected volume

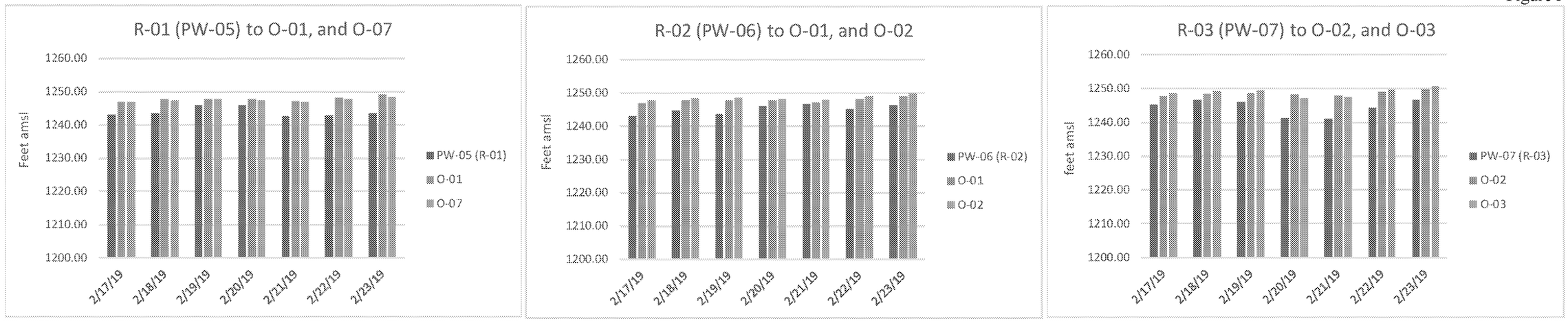


Figure 3. Recovery and observation well pairs